

**exo-R-MECAMYLAMINE ENANTIOMER FORMULATION AND USE IN  
TREATMENT**

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**ABSTRACT**

A pharmaceutical composition includes a therapeutically effective amount of exo-R-  
10 mecamlamine or a pharmaceutically acceptable salt thereof, substantially free of exo-S-  
mecamlamine in combination with a pharmaceutically acceptable carrier. Preferably the  
amount is about 0.5 mg to about 20 mg. Medical conditions are treated by administering a  
therapeutically effective amount of exo-R-mecamlamine or a pharmaceutically acceptable salt  
thereof, substantially free of its exo-S-mecamlamine, said amount being sufficient to ameliorate  
15 the medical condition. The medical conditions include but are not limited to substance addiction  
(involving nicotine, cocaine, alcohol, amphetamine, opiate, other psychostimulant and a  
combination thereof), aiding smoking cessation, treating weight gain associated with smoking  
cessation, hypertension, hypertensive crisis, Tourette's Syndrome and other tremors, cancer (such  
as small cell lung cancer), atherogenic profile, neuropsychiatric disorders (such as bipolar  
20 disorder, depression, an anxiety disorder, schizophrenia, a seizure disorder, Parkinson's disease  
and attention deficit hyperactivity disorder), chronic fatigue syndrome, Crohn's disease,  
autonomic dysreflexia, and spasmogenic intestinal disorders.